The aim of our study was to determine the efficacy of antiplatelet therapy in elderly and polymorbid patients. We were interested to know whether selected laboratory parameters, co-existing conditions, and concomitant therapy may affect the antiplatelet effect of low-dose acetylsalicylic acid.

In our study groups, we demonstrated high urinary levels of 11-dehydrothromboxane B2 suggesting ineffective antiplatelet therapy. In our series, its prevalence was in excess of 46%. A comparison of groups of aspirin-sensitive and aspirin-resistant patients revealed statistically significant differences in CRP levels, smoking status, previous stroke, and atrial fibrillation. Patients with effective antiplatelet therapy were more often treated with statins, nitrates, and beta-blockers.

Determination of the serum levels of salicylates showed a major role in the high prevalence of ineffective antiplatelet therapy was played by patient non-compliance.